

## Receiving Report

Date: 10/4/19

Batch No: M114915

Supplier: MAGNA

Dart P/O: 11621

Packing Slip: Yes ☒ No ☐  
 Invoice: Yes ☐ No ☒  
 Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐  
 Waybill Attached: Yes ☐ No ☒  
 Shipment Complete: Yes ☒ No ☐ N/A ☐  
 QC6 Inspection ☒ N/A ☐  
 Work Order ☒ N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12

*[Signature]*

Production/Admin: 10/4/19  
 Date     
 Received/Costing     
 Initial   

Location



**Magna Stainless**  
5775 Kieran St, Saint-Laurent QC H4S 0A3  
Phone: (514) 339-1211 Watts: 1-800-363-6646 Fax: (514) 339-1105

# INVOICE

Pg 1 of 1 I025855

RECEIVED APR 23 2010

**SOLD TO:**

00003858  
DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY , ON  
K6A 1K7

**SHIP TO:**

DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY , ON  
K6A 1K7

MTR:Y

INVOICE DATE:	04/19/10
ORDER DATE:	04/12/10
SHIP DATE:	04/19/10
ORDER NUMBER:	W028031
PURCHASE ORDER:	P011621

Currency	Sales Person	Ship Via	F.O.B.	Terms
CANADIAN DOLLARS	ERYCK BLAIS	NIR:R-557065-1	PREPAID	NET 30 DAYS

Ln	Back Ordered	Ordered	Unit	Description	Shipped	Price Per	Value
				ALUMINUM FLATS			
		1	PC	AFL 6061 T6 3/4" x 1-1/2" x R/L L038352 12' 1 PC/17 LB	1 UN	65.00	65.00
		5	PC	AFL 6061 T6 1" x 2" x R/L L038353 12' 5 PC/144 LB	5 UN	99.00	495.00
		1	PC	AFL 6061 T6 1" x 6" x R/L L038354 12' 1 PC/87 LB	1 UN	258.00	258.00
				ALUMINUM - LB			
		2	PC	2024-T3 .040 X 48" X 144" L038355 2 PC/55 LB	2 UN	195.00	390.00
		1	PC	7075-T651 1" SQ X 12" L038356 1 PC/15 LB	1 UN	195.00	195.00
				ALUMINUM ROUND BAR			
		5	PC	ARB 6061 T6 5/8" x R/L L038357 12' 5 PC/23 LB	5 UN	31.00	155.00
				STAINLESS - LB			
		1	PC	17-4 PH 1/4" X 4" X 12'8" L038358 1 PC/46 LB	1 UN	295.00	295.00

04/20/10 15:26:34

PST Exmp No:EXEMPT

Merchandise:	1,853.00
Surcharges:	
No Tax Costs:	
GST	92.65
Total Due:	1,945.65

Title to the goods sent out on this invoice remains with Magna Stainless Div of CSM ULC until such time as this invoice has been paid in full. Unless otherwise noted terms are 30 days. Interest accrues on all overdue accounts at the rate of 1.5% per month compounded monthly.

Q.S.T. # 1213236471  
G.S.T. # 881565899 RT0001

# Purchase Order Receipt Listing

Page 1 of 2

April 19, 2010 8:52:31 AM

All amounts are calculated in domestic currency.

All Vendors PO ID PO11621 Receipt Dates from 4/19/2010 to 4/19/2010 All Line Item Types

All Item ID/GL/WOs All Rec. Employees All Currencies

Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
<b>VendorID/Vendor Name VC-MAG002 Magna Stainless</b>											
PO11621	1		M6061T6R0.625 f		4/13/2010	4/19/2010	60.0000	\$2.58	0.0000	0	\$155.00
CAD	No		6061-T6 Round Bar .625"	f	60.0000	DCUSER		\$155.00	0.0000	0	
			114415								
	5		M6061T6B0.750X01. f		4/13/2010	4/19/2010	12.0000	\$5.42	0.0000	0	\$65.00
	No		500								
			6061-T6 Bar .750 X	f	12.0000	DCUSER		\$65.00	0.0000	0	
			1.50								
			114415								
	7		M6061T6B1.000X02. f		4/13/2010	4/19/2010	60.0000	\$8.25	0.0000	0	\$495.00
	No		000								
			6061-T6 Bar 1.00 x	f	60.0000	DCUSER		\$495.00	0.0000	0	
			2.00								
			114415								
	8		M6061T6B1.000X06. f		4/13/2010	4/19/2010	12.0000	\$21.50	0.0000	0	\$258.00
	No		000								
			6061T6 BAR 1.00 X	f	12.0000	DCUSER		\$258.00	0.0000	0	
			6.00								
			114415								
	9		M7075T6B1.000X1.0 f		4/13/2010	4/19/2010	12.0000	\$24.58	0.0000	0	\$295.00
	No		00								
			7075 T6 BAR 1.00	f	12.0000	DCUSER		\$295.00	0.0000	0	
			x1.00								
			114415								
	10		M174B0.250X4.000 f		4/13/2010	4/19/2010	12.8000	\$24.58	0.0000	0	\$314.62
	No		17-4 SS Bar .250 X	f	12.0000	DCUSER		\$314.62	0.0000	0	
			4.00								
			114415								
	12		M2024T3S.040 sf		4/13/2010	4/19/2010	96.0000	\$6.09	0.0000	0	\$584.64
	No		2024-T3 .040 sheet	sf	96.0000	DCUSER		\$584.64	0.0000	0	
			114415								

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
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# Magna Stainless

5775 Kieran St, Saint-Laurent, Quebec H4S 0A3  
Phone: (514) 339-1211 Watts: 1-800-363-6646 Fax: (514) 339-1105



## PACKING LIST

Page 1 of 1

I025855

SOLD TO:  
DART AEROSPACE LTD  
1270 ABERDEEN STREET

SHIP TO:  
DART AEROSPACE LTD  
1270 ABERDEEN STREET

HAWKESBURY , ON  
K6A 1K7  
Contact: CHANTAL

HAWKESBURY , ON  
K6A 1K7  
Ship Terms: PREPAID



MTR:Y

SPECIAL INSTRUCTIONS

Currency		Sales Person	Customer Phone	Customer Fax	Customer PO	
CANADIAN DOLLARS		ERYCK BLAIS	(613) 632-5200	(613) 632-1053	P011621	
Sales Order	Terms		Ship Via	Date Ordered	Date Required	Date Shipped
W028031	NET 30 DAYS		NIR:R-557065-1	04/12/10	04/19/10	04/19/10

Ordered	Back Ordered	Unit	Description	Bundle #	Heat #	Shipped
1		PC	ALUMINUM FLATS AFL 6061 T6 3/4" x 1-1/2" x R/L			1
5		PC	12' 17 LB / 1 PC	L038352	20444295	1
1		PC	12' 144 LB / 5 PC	L038353	201000169	5
			12' 87 LB / 1 PC	L038354	201000801	1
2		PC	ALUMINUM - LB 2024-T3 .040 X 48" X 144"			2
1		PC	7075-T651 1" SQ X 12' 55 LB / 2 PC	L038355	590542	2
			15 LB / 1 PC	L038356	20126908	1
5		PC	ALUMINUM ROUND BAR ARB 6061 T6 5/8" x R/L			5
			12' 23 LB / 5 PC	L038357	201001258	5
1		PC	STAINLESS - LB 17-4 PH 1/4" X 4" X 12'8"			1
			46 LB / 1 PC	L038358	674304	1
Bundles: 1	Skids: 1			Approx Weight:		387 LB

Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Signature: \_\_\_\_\_

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577

\*\*\*OUTSTANDING PO REPRINT\*\*\*

Purchase Order ID PO11621

Purchase Order Date 4/8/2010

PO Print Date 4/19/2010

Page Number 1 of 3

Order From :

VC-MAG002

MAGNA STAINLESS  
5775 RUE KIERAN  
ST LAURENT, QC H4S 0A3  
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	800 363 6646	Requisition Nbr	
Vendor Fax	514 339 1105	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty	Unit Price	Extended Price
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Ship To : DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req. Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M6061T6R0.625	6061-T6 Round Bar .625"	4/13/2010 Yes	✓ 60.00 f	Yours ppd	\$2.5833	\$155.00

Special Inst: MATERIAL: 6061-T6/T651/T6510/T6511/T62  
ALUMINUM ROUND BAR  
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116  
OR ASTM B211 OR ASTM B221

Line Total: \$155.00

5	M6061T6B0.750X01.500	6061-T6 Bar .750 X 1.50	4/13/2010 Yes	✓ 12.00 f	Yours ppd	\$5.4167	\$65.00
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Special Inst: AS ABOVE

Line Total: \$65.00

4/14/2010

REFERENCE ONLY

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577

\*\*\*OUTSTANDING PO REPRINT\*\*\*

Purchase Order ID PO11621

Purchase Order Date 4/8/2010

PO Print Date 4/19/2010

Page Number 2 of 3

Order From :

VC-MAG002

MAGNA STAINLESS  
5775 RUE KIERAN  
ST LAURENT, QC H4S 0A3  
CA

Contact Name

Vendor Phone 800 363 6646

Vendor Fax 514 339 1105

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr 10127-2607

Terms

Net 30

Currency

CAD

FOB

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty	Unit Price	Extended Price
7	M6061T6B1.000X02.000	6061-T6 Bar 1.00 x 2.00	4/13/2010 Yes	✓ 60.00 f	Yours ppd	\$8.2500 \$495.00
		Special Inst:	AS ABOVE	Line Total:		\$495.00
8	M6061T6B1.000X06.000	6061T6 BAR 1.00 X 6.00	4/13/2010 Yes	✓ 12.00 f	Yours ppd	\$21.5000 \$258.00
		Special Inst:	AS ABOVE	Line Total:		\$258.00
9	M7075T6B1.000X1.000	7075 T6 BAR 1.00 x1.00	4/13/2010 Yes	✓ 12.00 f	Yours ppd	\$24.5830 \$295.00
		Special Inst:	MATERIAL: 7075-T73/7075- T7351/T73510/T73511 BAR PER AMS-QQ-A-200/11 OR AMS-QQ- A-225/9 OR AMS 4124 OR AMS-QQ-A-250/12	Line Total:		\$295.00

*PU 10/4/19*

4/14/2010

REFERENCE ONLY

Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577

\*\*\*OUTSTANDING PO REPRINT\*\*\*

Purchase Order ID PO11621

Purchase Order Date 4/8/2010

PO Print Date 4/19/2010

Page Number 3 of 3

Order From :

VC-MAG002

MAGNA STAINLESS  
5775 RUE KIERAN  
ST LAURENT, QC H4S 0A3  
CA

Contact Name

Vendor Phone 800 363 6646

Vendor Fax 514 339 1105

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr 10127-2607

Terms

Net 30

Currency

CAD

FOB

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty	Unit Price	Extended Price
10	M174B0.250X4.000	17-4 SS Bar .250 X 4.00	4/13/2010 Yes	12.00 f	Yours ppd	\$24.5800 \$294.96

Special Inst:

MATERIAL 17-4 PH SS BAR  
PER AMS 5604/5643  
GRAIN MUST RUN ALONG LENGHT  
OF BAR  
MIN: YIELD TENSILE STRENGHT =  
100KSI  
MIN: ULTIMATE TENSILE  
STRENGHT = 150 KSI

Line Total:

\$294.96

12	M2024T3S.040	2024-T3 .040 sheet	4/13/2010 Yes	96.00 sf	Yours ppd ✓	\$6.0900 \$584.64
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Special Inst:

MATERIAL: 2024-T3 ALUMINUM  
SHEET  
PER QQ-A-250/4 OR AMS-QQ-A-  
250/4 OR ASTM 4037 OR ASTM B209

Line Total:

\$584.64

Outstanding PO Total:

\$2,147.59

REFERENCE ONLY

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

Change Nbr: 3

Change Date: 4/14/2010



PO09751-20444295

C3318

**sapa** Sapa Industrial Extrusions  
53 POTTSVILLE STREET  
CRESSONA, PA  
17929-0187  
Sapa Extrusions Inc., a Subsidiary of Sapa AB

# Certified Inspection Report

Sales Order Number		Cert Number	
1100177525		SAPA204998	
Line No.	Customer P/O	Page	1 of 2
8	P0032SCG002-8	Cert Creation Date	Cert Print Date
		07-APR-10	07-APR-10

Quantity Shipped	Date Shipped	Item Description	Specification
3241 LB	07-APR-10	Extruded Rectangular Bar 0.750 TK x 1.500 W RAD	ASTMB221 REV 08 AMS-QQ-A-200/8 REV ASMESB221 REV 09 UNSWA96061 REV
B/L	Item No.	144 IN LN FIN M-MILL	
122119	G03362004	W/F 1.323 F 03 CS 1.7	
Delivery Id	Item No. Rev	6061/T6511	
4095209		Marking CONTINUOUS	
Customer Part No.			
.75x1.5			

## Applicable Specifications, Revisions and Exceptions

Certificate in accordance with EN10204 3.1

COMPOSITION NOTE: The values for 'Others Each' and 'Others Total' have met the limits as shown on this certified inspection report. Residual is Aluminum.

## Legal Statement

We hereby certify that, unless otherwise indicated, the material covered by this report has been manufactured, inspected, and tested in accordance with, and has been found to meet, the applicable requirements described herein, including any specifications forming a part of the description and that samples representative of the material met the composition and had the mechanical properties shown on the face of this certification. Also, note that mercury is not a normal contaminant in aluminum alloys and neither it nor any of its compounds are used in the manufacture of our product. This certification is not to be reproduced in partial form without prior written approval of our Quality Assurance Dept.

## Signature And Title

*Dave A. Lukasak*  
Dave A Lukasak  
Tech/Quality Manager

07-APR-10

## Quantities per Lot / Packages

Package Number	Lot Number	Quantity	UOM	Weight	
				Gross	Net
G12-PKG1209662	20444295	32	PCS	507	501
G12-PKG1209663	20444295	32	PCS	507	501
G12-PKG1209664	20444295	32	PCS	507	501
G12-PKG1209667	20444295	32	PCS	507	501
G12-PKG1209668	20444295	32	PCS	507	501
G12-PKG1209688	20444295	47	PCS	742	736

## Composition Limits

Inc 04-16-10

S00412D6024-3 MAGNA STAINLESS PO: P009351 Part #: 1.00PC 17.00LB

**sapa:** Sapa Industrial Extrusions  
53 POTTSVILLE STREET  
CRESSONA, PA  
17929-0187

## Certified Inspection Report

Sales Order Number 1100177525		Line No. 8	Customer P/O P00325CG002-8	Cert Number SAPA204898	Page 2 of 2
				Cert Creation Date 07-APR-10	Cert Print Date 07-APR-10

Alloy	Si		Fe		Cu		Mn		Mg		Cr		Zn	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
6061	0.40	0.80	—	0.70	0.15	0.40	—	0.15	0.80	1.20	0.04	0.35	—	0.25
Alloy	Ti		Bi		Pb		Others Each		Others Total					
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max				
6061	—	0.15	—	—	—	—	—	0.05	—	0.15				

### Composition Results

Heat/Cast	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Bi	Pb	Others Each	Others Total
5023146	0.64	0.19	0.20	0.04	0.84	0.05	0.02	0.01	—	—	—	—

### Mechanical Property - Test Limits

Test Type			UTS - L		TYS - L		EL 4D-Long	
BOL			KSI		KSI		PCT	
Fof Test			-		-		-	
Test Temper	Lot Number	# of Tests	MIN Value	MAX Value	MIN Value	MAX Value	MIN Value	MAX Value
T6511	20444295	4	43.9	45.7	41.0	43.1	15.8	17.3

### Cert Notes

Products manufactured with a T6511 temper also meet T6 temper requirements.  
Yield strength has been determined by the 0.2% offset method.  
All Alloys Produced at Sapa Industrial Extrusions comply with 0.4% Maximum Lead per RoHS, with the exception of 6262 alloy.  
In accordance with EN 10204, Test Report Type 2.2 and Certificate Type 3.1  
Melted in the USA or Other Qualified Countries as Defined by DFARS 225.872.1  
Made in USA

Inc 04-16-10

S00412DC024-3 MAGNA STAINLESS PO: P009351 Part #: 1.00PC 17.00LB



SERVICE CENTER METALS  
5850 Quality Way  
Prince George, VA 23875

# CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

MANIFEST NUMBER

98423

DIE NUMBER

MRB0477

DATE OF SHIPMENT

2/9/2010

CUSTOMER PO

P91221CG014 CT

ALLOY & TEMPER

6061-T6511

SALESPERSON

David Schroeder

CUSTOMER PART NUMBER

MRB0477

DESCRIPTION

MQRB 1.000x2.000

OUR ORDER NUMBER

100214

ITEM

26

CERTIFICATION

ASTM-B221-08 StencilContinuous

SPECIFICATION

AMS-QQA-200/8

Quantity Certified 13,501 lbs 472pcs

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA from ingot melted and cast in the United States or Canada.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

## Mechanical Properties

Test No.	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
1	201000169	02/09/10	51.9	49.2	18.3
2	201000169	02/09/10	49.8	46.8	19.8
3	201000169	02/09/10	50.2	47.2	18.9
4	201000169	02/09/10	50.2	47.2	14.0
5	201000169	02/09/10	49.5	46.5	18.7
6	201000169	02/09/10	52.3	49.1	18.5
7	201000169	02/09/10	50.5	47.4	19.4
8	201000169	02/09/10	50.8	48.1	20.1
9	201000169	02/09/10	51.8	48.9	16.4
10	201000169	02/09/10	50.3	47.5	17.3

## Chemical Composition for Alloy 6061

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other	Each	Total	Al	Melted In
6061	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15		Remainder	
	Max												
	Min	0.40	-	0.15	-	0.8	0.04	-					

United States of America

P009751 - 201000801

C3320



SERVICE CENTER METALS  
5850 Quality Way  
Prince George, VA 23875

# CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
100214	32

MANIFEST NUMBER  
99012

DIE NUMBER  
PL0130

DATE OF SHIPMENT  
2/16/2010

CERTIFICATION  
ASTM-B221-08 StencilContinuous

CUSTOMER PO  
P91221CG014 CT

ALLOY / TEMPER  
6061-T6511

SALESPERSON  
David Schroeder

SPECIFICATION  
AMS-QQA-200/8

CUSTOMER PART NUMBER  
PL0130

DESCRIPTION

PL 1.000x6.000

Quantity Certified 8,737 lbs 103pcs

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA from ingot melted and cast in the United States or Canada.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

## Mechanical Properties

Test No. Lot No.

Test No.	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
1	201000801	02/15/10	48.2	45.7	16.4
2	201000801	02/15/10	47.7	45.0	16.4

S/S 10/10

Inc 04-16-10

## Chemical Composition for Alloy 6061

Alloy		Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other	Each	Total	Al	Melted In
6061	Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15		Remainder	
	Min	0.40	-	0.15	-	0.8	0.04	-	-					

United States of America

Rev. 3/06/07 - UMS

Print Date: 2/16/2010

Robert M. Ramage Ph.D, Director of Quality & Technical Services

S00412DC024-5 MAGNA STAINLESS PO: P009351 Part #: 1.00PC 87.00LB

PO09751-590542

C3313

# CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA DAVENPORT WORKS

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Per: *[Signature]*  
 Malcolm Murphy  
 Director of Manufacturing Davenport Works

*[Signature]*  
 Kenton P. Young  
 Quality Assurance Manager

1087640 0  
 Ship Date B.L. No. Invoice No. Alcoa No. Item Page  
 2010-01-23 4570244 00000 1000179693-1 DS-79693-1  
 P.O. No./Govt Contract No. Customer Alcoa Item  
 P00118DK004 Ln#: 1 15403R09

## Item Description

0.04 IN TK (+.0020 -.0020) X 48.0 IN W (+.125 -.125) X 144.0 IN LN (+.15625 -.15625) CAT D 126137 (N) A/T 2024-T3 FLAT SHEET MILL FINISH, AMS-QQ-A-250/4  
 REV A IS 2007 EXC MRK AMS4037 REV N IS 2008  
 EXC MRK ASTM B209 REV 07 ((MARKED)) KRAFT PAPER  
 INTERLEAVED MAX  
 GROSS SKID WGT: 4750 LB QUAN TOL +/-10 %  
 CQR D126137 REV 30 CUST REQ 10-01-18 \*\*\* W/E 10-01-23 \*\*\*

Num	Package Ticket	Lot	Weight	Quantity	UOM	Inspector Clock Numbers
1	759974	590542	3910	143	PC	27348 46993

Notes for CQR: D126137.30

PRODUCT PRODUCED AND MARKED TO THE REQUIREMENTS OF AMS-QQ-A-250/4 ALSO MEETS THE REQUIREMENTS OF QQ-A-250/4E, AMENDM ENT 2.  
 PRODUCT PRODUCED AND MARKED TO THE REQUIREMENTS OF QQ-A-250/4E AMENDMENT 2 ALSO MEETS THE REQUIREMENTS OF AMS -QQ-A-250/4.

CQR: D126137.30 -Specification Limits

Temp Dir	UTS	TYS	EL4D
T3 Long Transv.	Max KSI	KSI	PCT
	Min	63.0	42.0 15

Chemical Composition	SI	FE	CU	MN	MG	CR	ZN	TI	Other	Other
Alloy 2024	Max	0.50	0.50	4.9	0.9	1.8	0.10	0.25	0.15	0.05
Lot: 590542	Min			3.8	0.30	1.2				0.15

Mechanical, Physical, Metallography, Quantometer Results			REMAIN	
Temp Dir	No->	UTS	TYS	EL4D
T3 Long Transv.	Test	KSI	KSI	PCT
	6	65.6	43.6	19.9
		65.1	43.8	19.2
		65.2	43.8	21.2
		65.5	43.8	19.6
		65.3	43.7	20

Inc 04-16-10

S00412DG024-1 MAGNA STAINLESS PO: P009351 Part #: 2.00PC 55.00LB

# CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA

DAVENPORT WORKS

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Per:

*[Signature]*

Malcolm Murphy  
Director of Manufacturing Davenport Works

*[Signature]*

Kenton P. Young  
Quality Assurance Manager

1087640	0				
Ship Date	B.L. No.	Invoice No.	Alcoa No.	Item	Page
2010-01-23	4570244	00000	1000179693-1	DS-79693-1	2
P.O. No./Govt Contract No.	Customer	Alcoa Item			
P00118DK004 Ln#: 1					

Lot: 590542 - Mechanical, Physical, Metallography, Quantometer Results (cont.) ---  
65.8 44 18.7

Cast Number	Chemical - OES	SI	FE	CU	MN	MG	CR	ZN	TI
H2896047	Actuals	0.06	0.17	4.6	0.62	1.5	0.00	0.15	0.03

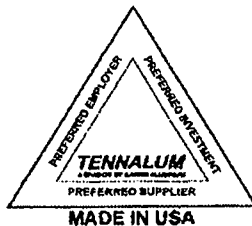
This material was melted in the United States or a Qualifying Country [REF DFARS 225.872.1(a)]; it was manufactured in the United States

Inc 04-16-10

S00412DG024-1 MAGNA STAINLESS PO: P009351 Part #:  
2.00PC 55.00LB

# KAISER ALUMINUM FABRICATED PRODUCTS

Tennalum  
PO Box 669  
Jackson, TN 38302  
731-423-2811



**CERTIFIED TEST REPORT**  
<http://Certs.KaiserAluminum.com>

CUSTOMER PO NUMBER: <b>P91116OD003-15</b>		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION: <b>Cold Finished Square</b>	
KAISER ORDER NUMBER: <b>655744</b>	LINE ITEM: <b>15</b>	SHIP DATE: <b>01/22/2010</b>	ALLOY: <b>7075</b>	TEMPER: <b>T651</b>	
WEIGHT SHIPPED: <b>2095 lbs.</b>	QUANTITY: <b>144 pcs.</b>	B/L NUMBER: <b>30305</b>	DIAMETER THICKS: <b>1.000 In.</b>	WIDTH: <b>0.000 In.</b>	LENGTH: <b>144.0 In.</b>

S  
10/04/15

Test Code: 1000 AC

## Actual Physical Properties

Lot Number	LONG. UTS ksi	LONG. YTS ksi	LONG. ELONG. %
20126908	82.6	76.3	18.0
	81.5	74.7	18.0
	82.8	76.6	18.0

## Chemical Composition, WT. % (Aluminum Remainder)

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	OTHERS EACH	OTHERS TOTAL	Lot
Actual	0.08	0.25	1.4	0.10	2.6	0.20	5.8	0.01			20126908
Max	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.15	
Min			1.2		2.1	0.18	5.1				

## Specifications

Standard: ISO 9001, ASTM B211-03, AMS 4123, AMS-QQ-A-225/9

## CERTIFICATION

Kaiser Aluminum & Chemical Corporation ("Kaiser") hereby certifies that the metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

John Rennekamp, Quality Manager

*John Rennekamp*

Plant Serial: 130133

Kaiser Order Number: 655744

Page 1 of 2

Line Item: 15

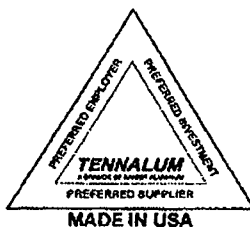
P009351-20126908

C3321

# **KAISER ALUMINUM**

**FABRICATED PRODUCTS**

Tennalum  
PO Box 669  
Jackson, TN 38302  
731-423-2811



**CERTIFIED TEST REPORT**  
<http://Certs.KaiserAluminum.com>

## **Miscellaneous Notes**

Made in USA

This material was melted and manufactured in the USA. Mercury is not a normal contaminant in aluminum alloys. Neither mercury nor any of its compounds were utilized by Kaiser Aluminum in the manufacture of this material. This material meets the requirements of (cold finished) T6 temper, AMS 4122K and QQ-A-225/9E (CANCELLED). AS9100B:2004 Material is RoHS compliant.

## **CERTIFICATION**

Kaiser Aluminum & Chemical Corporation ("Kaiser") hereby certifies that the metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

John Rennekamp, Quality Manager

Plant Serial: 130133

Kaiser Order Number: 655744

Page 2 of 2

Line Item: 15





SERVICE CENTER METALS  
5850 Quality Way  
Prince George, VA 23875

# CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

0009751-201001258

C3317

OUR ORDER NUMBER	ITEM
102269	2

MANIFEST NUMBER 100017  
DIE NUMBER RD0002  
DATE OF SHIPMENT 3/3/2010  
CUSTOMER PO P00119DS003 CT  
SALES PERSON David Schroeder  
CUSTOMER PART NUMBER RD0002  
ALLOY / TEMPER 6061-T6511  
DESCRIPTION ROD .625 +/- .005

CERTIFICATION  
ASTM-B221-08 No Stencil  
SPECIFICATION  
AMS-QQA-200/8

Quantity Certified 6,148 lbs #### pcs

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA from ingot melted and cast in the United States or Canada.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

## Mechanical Properties

Test No.	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
1	201001258	02/27/10	47.4	43.2	16.1
2	201001258	02/27/10	49.3	45.1	16.0
3	201001258	02/27/10	47.9	44.1	16.3
4	201001258	02/27/10	47.5	43.4	15.9
5	201001258	02/27/10	47.5	43.6	16.4
6	201001258	02/27/10	53.3	50.2	19.7
7	201001258	02/27/10	48.9	45.3	18.0
8	201001258	02/27/10	48.2	44.4	18.0
9	201001258	02/27/10	52.1	47.9	19.2
10	201001258	02/27/10	48.1	44.1	19.9
11	201001258	02/27/10	49.6	45.9	19.8
12	201001258	02/27/10	47.5	43.4	19.0
13	201001258	02/27/10	51.6	47.3	19.4
14	201001258	02/27/10	48.6	44.7	17.5
15	201001258	02/27/10	51.9	47.6	18.3

Inc 04-16-10

S00412DG024-2 MAGNA STAINLESS PO: P009351 Part #: 5.00PC 23.00LB



SERVICE CENTER METALS  
5850 Quality Way  
Prince George, VA 23875

# CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
102269	2

MANIFEST NUMBER

100017

DIE NUMBER

RD0002

DATE OF SHIPMENT

3/3/2010

CUSTOMER PO

P00119DS003 CT

ALLOY / TEMPER

6061-T6511

SALESPERSON

David Schroeder

CUSTOMER PART NUMBER

RD0002

DESCRIPTION

ROD .625 +/- .005

CERTIFICATION

ASTM-B221-08 No Stencil

SPECIFICATION

AMS-QQA-200/8

Quantity Certified 6,148 lbs ##### pcs

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA from ingot melted and cast in the United States or Canada.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

Inc 04-16-10

## Chemical Composition for Alloy 6061

Alloy		Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other	Each	Total	Al	Melted In
6061	Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15		0.05	0.15	Remainder	
	Min	0.40	-	0.15	-	0.8	0.04	-	-					

United States of America

Rev. 9/06/07 - UMS

Print Date: 3/3/2010

  
Robert M. Ramage Ph.D, Director of Quality & Technical Services

S00412DG024-2 MAGNA STAINLESS PO: P009351 Part #:

5.00PC 23.00LB

<b>BÖLLINGHAUS</b> STEEL		Aufnahmeprüfzeugnis / Mill Test Certificate / Certif. de Qualidade EN 10204:2004 / 3.1		No.: / Nr.: / Nr.: 0000064623																														
Böllinghaus Portugal Aços Especiais, SA OIN EN ISO 9001:2000 TÜV CERT No. 01 100 030458		Unsere innere Verweisung / Our Int. Ref / N° ref Int 5600010587 000010		Datum / Date / Data 02.06.2009																														
Normen / Standards / Normas AISI 630/17-4PH, tol. acc. to ASTM A484/A484M-08, specifications acc. to: ASTM A370-09, A564/A564M-04, E370, AMS 5643R, ASME SA 370, SA 564, ASTM F899-09, MTR acc. to EN 10204/3.1																																		
<div style="text-align: right; font-size: 2em; transform: rotate(-15deg);">8/10/19</div>																																		
Bestell Nr / Order Nr / End.Nr. P90319AM005		Bestell Nr / Order Nr / End.Nr. 90319AM005 BY BELL, CERTIFICATION PROCESSOR																																
Prüfgegenstand / Product / Produto AISI T630 FLAT 4 x 1/4"		Gewicht / Weight / Peso 600 lb		Bunde / Bundle / Atados 01																														
Werkstoff-Nr. Material-no. Qualidade 1.4542		Werkstoff-Normbezeichnung / Material standard grade / Norma do material 630																																
Beschreibung / Description / Descrição Stainless steel flat bars, hot rolled, solution annealed, straightened, pickled US DFAR 252.225-7014: MELT SOURCE: France / MFG: Portugal.																																		
Schmelzen Nr. Cast nr. / Fusão nr. 674304																																		
Chemische Analyse in % / Chemical composition in % / Análise química em % <table border="1"> <tr> <td>C:</td><td>0.024</td><td>Si:</td><td>0.290</td><td>Mn:</td><td>0.760</td><td>P:</td><td>0.030</td><td>S:</td><td>0.018</td><td>Cr:</td><td>15.350</td><td>Ni:</td><td>4.530</td> </tr> <tr> <td>EAF</td><td>Mo:</td><td>0.210</td><td>Co:</td><td>0.061</td><td>Cu:</td><td>3.190</td><td>N:</td><td>0.029</td><td>Ti:</td><td>0.022</td><td>Nb:</td><td>0.210</td><td>Ta:</td><td>0.000</td> </tr> </table>						C:	0.024	Si:	0.290	Mn:	0.760	P:	0.030	S:	0.018	Cr:	15.350	Ni:	4.530	EAF	Mo:	0.210	Co:	0.061	Cu:	3.190	N:	0.029	Ti:	0.022	Nb:	0.210	Ta:	0.000
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EAF	Mo:	0.210	Co:	0.061	Cu:	3.190	N:	0.029	Ti:	0.022	Nb:	0.210	Ta:	0.000																				
<table border="1"> <tr> <th>Proben Nr. Test no. Amostra no</th> <th>ASTM E399 Kerbschlagarbeit Impact Test Resistência (Charpy V) [J]</th> <th>Streckgrenze Yield point Tensão limite Rp 0.2 % [Ksi]</th> <th>Dehngrenze 1% point Limite de extensão Rp 1.0% [Ksi]</th> <th>ASTM A370 Zugfestigkeit Tensão strength Tensão de rotura Rm [Ksi]</th> <th>Dehnung Elongation Alongamento A (A50-50mm) [%]</th> <th>Einschnürung Reduction of area Coef. Estricção Z (A50-50mm) [%]</th> </tr> <tr> <td>3017922.01.01</td> <td></td> <td>182.5</td> <td>194.6</td> <td>210.6</td> <td>11.2</td> <td>51.4</td> </tr> </table>						Proben Nr. Test no. Amostra no	ASTM E399 Kerbschlagarbeit Impact Test Resistência (Charpy V) [J]	Streckgrenze Yield point Tensão limite Rp 0.2 % [Ksi]	Dehngrenze 1% point Limite de extensão Rp 1.0% [Ksi]	ASTM A370 Zugfestigkeit Tensão strength Tensão de rotura Rm [Ksi]	Dehnung Elongation Alongamento A (A50-50mm) [%]	Einschnürung Reduction of area Coef. Estricção Z (A50-50mm) [%]	3017922.01.01		182.5	194.6	210.6	11.2	51.4															
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3017922.01.01		182.5	194.6	210.6	11.2	51.4																												
Visuelle Kontrolle Visual inspection Inspeção visual <input checked="" type="checkbox"/> OK		ASTM E370 Härte Hardness Dureza 330 [HB]		Korrosionsbeständigkeit IC Test Corrosão Intermetálica Werkstoffverständiger Quality Control Representative Inspector da Qualidade José Santos																														
ASTM A484 Maßkontrolle Dimensional inspection Inspeção dimensional <input checked="" type="checkbox"/> OK		Mikroskopische Untersuchung Microstructure Analysis Approved per AMS 2315		Wärmebehandlung Heat treatment Tratamento térmico Solution Annealed 1900 °F (6 hrs)																														
Verwechslungsprüfung Test of identity Teste de identificação <input checked="" type="checkbox"/> OK		Makroskopische Untersuchung Macrostructure Analysis Material free from segregation defects. <input checked="" type="checkbox"/> OK		Alterungsbehandlung Aging treatment Ensaio de envelhecimento 428 HB H900 (900°F, 1Hour) Cool in air																														
Bemerkungen / Remarks / Observações Material is free of mercury contamination, no weld repair done. Material is free of radiation contamination		Böllinghaus Portugal - Aços Especiais, SA Hiermit bestätigen wir, dass das Material der oben genannten Spezifikation entspricht We confirm that this material meets the specification according to the mentioned standards Confirmamos que este material respeita as especificações de acordo com as normas referidas																																

FR 03.02.05/1

Inc 04-16-10

S00412DG024-7 MAGNA STAINLESS PO: P009351 Part #:

1.00PC 46.00LB

P009351-674304

C3322

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

B

PART NUMBER: M6061T6R[D.DDD]  
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES

EG. 5/8" ROUND BAR = M6061T6R0.625

REFERENCE ONLY

RELEASED  
2009-09-09  
JAP

B	REFORMAT DWG. ADD B211 & B221 SPEC (ZN D8-1). REF PAR 08-020A	CP	09.07.13
A	NEW ISSUE	DS	01.06.09
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.07.13		
<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6R		REV. B SHEET 1 OF 1	
TITLE 6061-T6 ROUND BAR		SCALE NTS	
COPYRIGHT © 2001 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries